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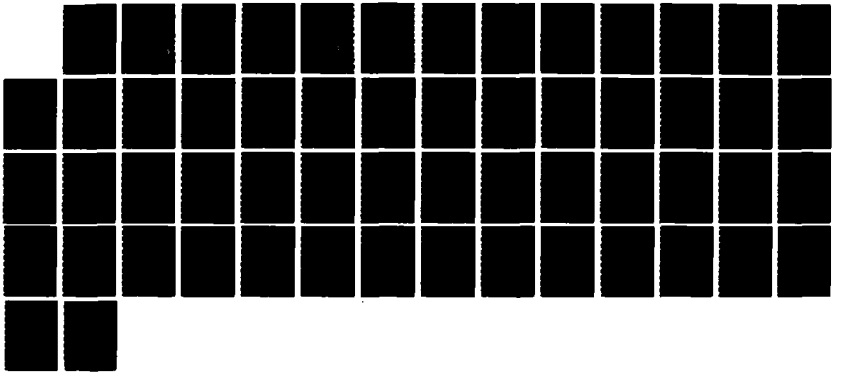

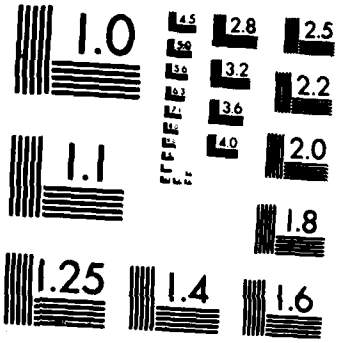

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The Artist's Approach To Military Decision-Making At the Operational Level

by

Major Richard J. Quirk III
Military Intelligence

School of Advanced Military Studies
U.S. Army Command and General Staff College
Fort Leavenworth, Kansas

16 May 1986

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ABSTRACT

THE ARTIST'S APPROACH TO MILITARY DECISION-MAKING AT THE OPERATIONAL LEVEL: by Major Richard J. Quirk III

The purpose of this study is to identify a decision-making process appropriate to the nature of operational art.

The monograph characterizes the process by which the operational level commander perceives the mission and the current situation, makes major decisions, and supervises the execution of his orders. It distinguishes those responsibilities which the commander, as the operational artist, should accomplish himself, from those responsibilities which the commander can properly delegate to his staff.

The monograph then contrasts the current military decision-making process, as promulgated in FM 101-5, with an alternative system which emphasizes the role of the commander as the operational artist.

Although this monograph is conceptual, rather than historical in focus, it draws heavily on the writings of World War II operational level commanders for its analysis, and upon a post-war decision-making model as the basis of its alternative approach to the process.

From the study one could conclude that the current decision-making process is inappropriate for many reasons, to include the following; it artificially narrows his perception of the battlefield, it relies on unreliable staff predictions, it fails to portray the risks within his operation, it is too time consuming, it stifles his artistic initiative, and it makes the command unnecessarily vulnerable to surprise. One could also conclude that it is possible, and even desirable at the operational level to plan and make decisions without relying on predictions and probabilities.

The study concludes that the Army should abandon the use of the current military decision-making process at the operational level. It recommends a replacement process which relies upon factual information to identify all risks and upon the coordinated efforts of commanders at all levels to address the risks as they are identified.

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INTRODUCTION

> War is a national undertaking which must be coordinated from the highest levels of policy making to the basic levels of execution. Military strategy, operational art, and tactics are the broad divisions of activity in preparing for and conducting war. Successful strategy achieves national and alliance political aims at the lowest possible cost in lives and treasure. Operational art translates those aims into effective military operations and campaigns, and sound tactics win engagements and battles which determine successful operations and campaigns.[1]

Within its presentation of AirLand Battle Doctrine, U.S. Army Field Manual 100-5, Operations, ackowledges the existence of a level of war residing between the strategic and the tactical. By assigning to it the title of "Operational Art", the manual implies that this intermediate level is not only quite different than the other two, but also that it is, in some way, a form of creative expression. The term is aptly chosen. Like other artistic disciplines, operational art is a process of translation. It seeks to accomplish an abstract purpose through the use of a concrete medium. Like other artists, the operational level commander resides in two worlds. Within the intangible, nebulous world of strategy, he finds his purpose. It is typically so broad as to be meaningless or even discomforting to the tactical commander. Within the very tangible world of tactics, he finds his medium of expression. This medium comprises his military force, its enemy, and the environment in which they oppose each other. The medium is typically so filled with difficulties and surprises as to threaten any lofty plan of the strategist. The commander must perceive these two worlds accurately if he is to link them with his operational art. He

will serve best if he appreciates the theoretical natures of strategy and tactics, if he internalizes his objective, and if he understands the current situation as the campaign progresses.

However, the challenge of bringing about a strategically significant result from tactical military action demands more than an accurate perception of reality. It calls for an artful conceptualization, or vision, of possible and desirable future conditions. The commander's conceptualization process resembles that of any other artist. He must envision the final work even as it yet resides hidden in a block of marble. His concept must honor a host of restrictions and constraints placed upon him from without, as well as his own strengths and weaknesses dictated from within. Inevitably, the sophisticated demand of conceptualization does not lend itself to textbook solutions. It is a challenge familiar to the artist, for it is one demanding a unified and highly individualized design. In any artistic endeavor, a single person must serve as the central intellect or owner of the concept. At the operational level of war, it is the commander who is commissioned to serve in this central role. His unified and well aimed concept is the best source of unity and direction for the entire command.

However, neither an accurate perception nor a brilliant conceptualization alone can win a campaign. The third essential element is execution. This is the physical process of bringing about change on the battlefield. It is at this juncture that tactical units embark upon the achievement of strategic objectives. Tactical forces ultimately demonstrate the

commander's collective ability to impose his will upon the enemy. Although he can rely upon lower level improvisation to overcome tactical surprise, the operational artist must be able to perceive significant alterations in the situation, conceive clearer visions of the desired product, and, when necessary, influence the ongoing execution.

In order to accomplish these three functions of perception, conceptualization, and execution, the artist must have appropriate tools. The Command and Control System provides many of these tools to the commander. At the heart of that system is the commander's staff, made up of military artisans and craftsmen, whose purpose is to help him shape the medium according to his will. There is reason to argue, however, that the staff's current procedures, originally established to support the tactical commander, are inappropriate tools for the use by the operational artist. This paper presents just such an argument. It recommends the adoption of a substantially different system of staff support, one which emphasizes the centrality of the commander in his role as operational artist.

FUNCTIONS OF THE STAFF

The fact that the operational commander requires a competent staff is generally accepted. However, there is room for disagreement as to the scope of the staff's authority and responsibility. FM 100-5 characterizes the role of the command and control system in these words;

> The only purpose of command and control is to implement the commander's will in pursuit of the unit's objective. The system must be reliable, secure, fast, and durable. It must collect, analyze, and

present information rapidly. It must communicate orders, coordinate support, and provide direction to the force in spite of enemy inteference, destruction of command posts, or loss and replacement of commanders. The key measure of command and control effectiveness is whether the force functions more effectively and more quickly than the enemy.[2]

This statement clearly establishes the commander's will as the single, unifying director of the overall operation. It implies that the staff's role is as an auxiliary, a rapid and reliable conveyer of information to aid the commander in his perception and his execution.

FM 101-5, Staff Organization and Operations, in its 1984 edition, does not make any specific allowances for the operational art. In fact, the manual does not address the operational level of war at all. In consonance with FM 100-5, however, it does recognize the need for greater speed and efficiency;

> Just as the modern battlefield presents significant challenges to commanders, it also will have a profound impact on staff functions at all levels. The modern battlefield will demand a significantly higher level of staff efficiency and will require greater initiative and coordination on the part of all staff officers.[3]

Unfortunately, the manual does not alter its military decision-making process to bring about these improvements. The process remains essentially unchanged in its philosophy as to the role of the staff, which is to;

> Facilitate and monitor the accomplishment of command decisions.
> Provide timely and accurate information to the commander and subordinate units.
> Anticipate requirements and provide estimates of the situation.
> Determine courses of action and recommend a course of action which will best accomplish the mission.[4]

This role of the staff conflicts with the nature of operational art in a number of subtle ways which will be discussed later. However, at least one area of disagreement should be readily apparent. The staff's responsibility to "Determine courses of action and recommend a course of action which will best accomplish the mission" clearly lies outside of FM 100-5's guidance that, "The only purpose of command and control is to implement the commander's will...". This additional staff function seems to be an excellent use of the commander's functional experts. One must inquire, however, as to the costs involved. The mere existence of such a responsibility permits the staff not only to implement the commander's will, but also to play a significant role in establishing it. It calls on the staff to develop its own perception and conceptualization. If true art reflects the unified viewpoint of a single person, then this corporate approach to decision-making may be the wrong tool for the job, because it deemphasizes and diffuses the artist's personal creativity and influence. Thus, one significant cost of the current system may be a loss of unity, vision, and style in the execution. A second cost has evolved from the fact that, in order to accomplish in a bureaucratic manner the conceptualization which is so natural for the artist, the staff has oriented its own attention and resources away from its responsibilities of rapid, reliable information and implementation of the commander's will. Perhaps as a result, the staff has yet to make any significant improvement in its

speed or reliability.

COL E. C. Townsend, a World War II division chief of staff, made a case for a limited and supporting role for the staff when he wrote;

> A staff acts only for the commander, or with his consent. A staff has no status all its own; it is only the commander's person expanded. The combined minds of the commander and his staff form the commander's Master Mind, available to him for his exercise of command...
>
> In order to assist a commander to the maximum, a staff must understand the commander's viewpoint, his responsibilities, and the functioning of the chain of command and its "inevitables"; in short, the staff must be able to think like the commander.[5]

Townsend goes on to outline a command and staff process in which the commander serves as the central creative intellect. The staff rapidly and reliably presents information and implements his will. The process is simple and robust. Townsend's system may in fact be more compatible with the needs of the artist, and may, at the same time, lighten the burden of the command and control system, permitting it to meet its overall function of speed, reliability, and accuracy at last. It is this system which the author presents for consideration.

NEEDS OF THE ARTIST

Faced with the inherent complexities of his job, the commander needs considerable support from his staff. Both FM 100-5 and FM 101-5 emphasize that the factor of time is critical in war.[6] Decisions must be made and operations must be initiated at the proper time. Perhaps even more critical than timing is speed. "The key measure of command and control effectiveness is whether the force functions more quickly and effectively than the

enemy.[7] The staff's role in this regard is to enhance the timing and speed of the command and control process.

The commander also needs a staff which can reliably provide him with information and implement his will. Reliability of information connotes that the staff must enable the commander to separate fact from assumption. Reliability of implementation connotes that the staff must provide the commander with a means which he can count on for conveying his will to other commanders, and for supervising its execution. If he cannot trust in the accuracy of staff information, or in the ability of the staff to implement his concept, then the staff may be working in opposition to the commander's needs. The commander can improve the reliability of his staff by assigning to it reasonable tasks. The commander who asks more than is possible of his staff must recognize a potential loss in reliability as a result.

Although the commander needs assistance from his staff, he must also retain certain processes to himself if he is to fulfill his duties as operational artist. Artists most jealously guard their freedom of perception and conceptualization. They see the world differently than do their apprentices, and they create unique visions which no one else could emulate. Like other artists, the operational level commander is the only person who can have a fully integrated perception of the campaign before him, and the only person who can develop a unified design which reflects his perception and his personal attributes. The commander

must therefore guard his freedom of perception and conceptualization if he is to practice operational art. The commander can use the staff to broaden his thinking, but he must be careful that the staff does not limit his thought by their own assumptions and opinions.

THE CURRENT SYSTEM

Today's military decision-making process promises to acquaint the commander with the tactical situation and to help him to make a decision without demanding his active intellectual involvement. The staff collects information, analyzes it, determines its pertinence, develops courses of action, and even recommends a specific choice to the commander. This process permits him to "create" and adopt a course of action with nothing more than a few moments' attention to a briefing and a nod of his head.

The staff simplifies the task of developing a concept and making decisions, not only by organizing available information, but also by "focusing" the commander's attention and resources to deal only with the likely outcomes of battle. It focuses his attention through its predictive staff estimates, which present him with a narrow range of courses of action for friendly or enemy forces. It encourages him to focus his resources by obtaining his commitment to an extremely specific plan long before a decision based upon fact would be possible. This early focusing of effort and interest helps the commander to form a concrete perception. As concrete and detailed as it may be, however, the view is not necessarily accurate.

MISSION ANALYSIS: The focusing effort begins early in the decision-making process (See Figure 1). After the commander receives or infers his new mission, he exchanges information with the staff concerning the current situation, and he then completes a mission analysis, restating his mission and issuing initial planning guidance. At the operational level, this mission analysis is an artistic process in which the commander envisions a set of achievable military conditions which will result in the realization of his strategic ends. It is understandable that the artist must focus his operation at this point by defining a mission. Nevertheless, even this essential elimination of other possibilities can be discomforting. An error in defining the military conditions which can bring about success may either cost lives or fail to produce the desired strategic effect out of tactical success. Perhaps most disconcerting is the fact that this decision-making process continues, with each step, to focus the commander's resources and his attention toward an ever narrowing range of actions and away from other, potentially easier ways of reaching the strategic goal.

STAFF ESTIMATES: Upon the completion of mission analysis, the commander calls the staff together. Based upon the mission and situation briefings, the commander issues them guidance for the preparation of their estimates. The staff estimates seem to be at the heart of the current decision-making process. These estimates consist of "significant facts, events, and conclusions (based upon current or anticipated situations) and recommendations..."[8] They include the courses of action mentioned

THE MILITARY DECISION-MAKING PROCESS

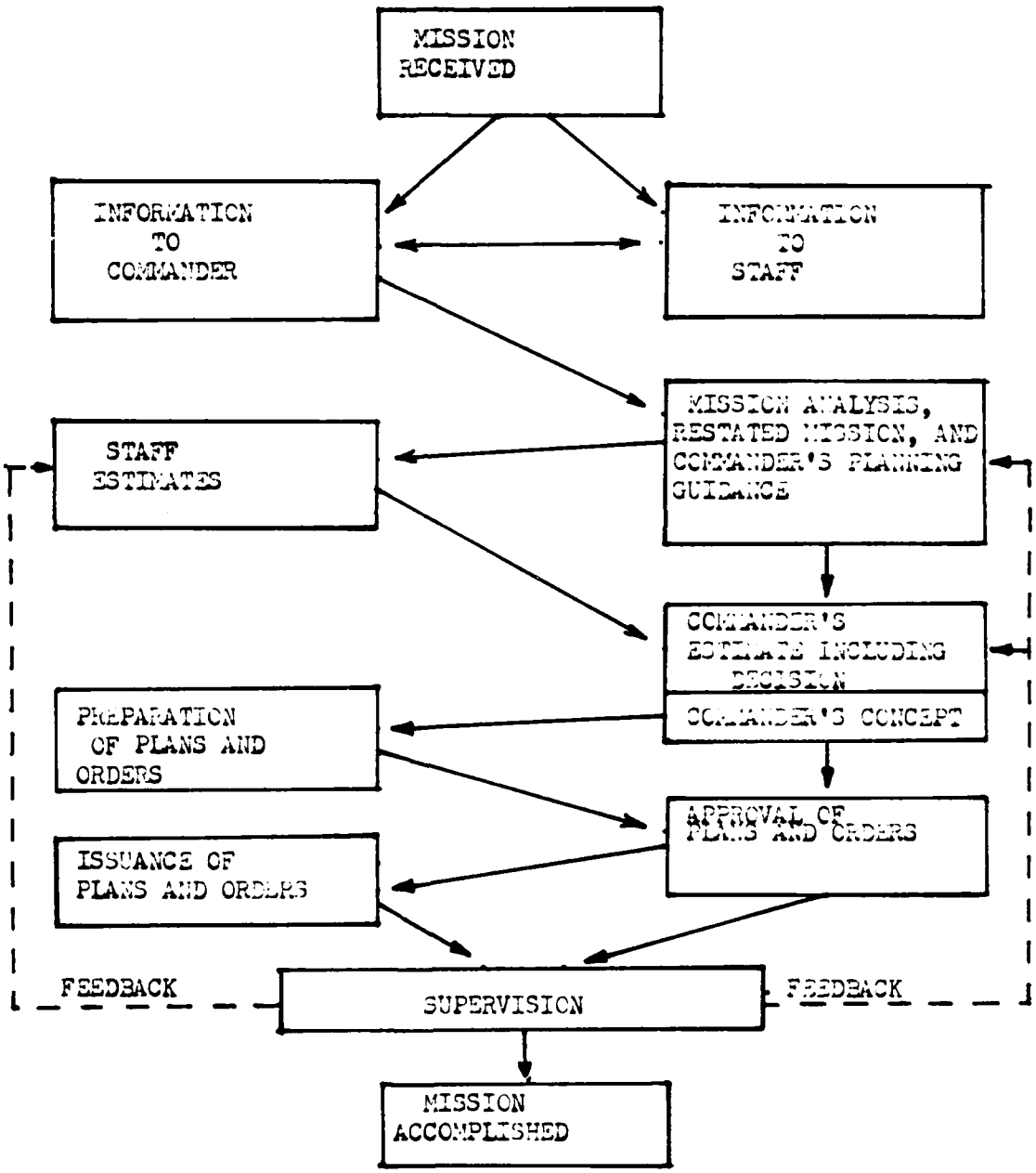


FIGURE 1

in FM 101-5. The commander uses the staff estimates as a foundation to "support his estimate of the situation".[9] They should provide the commander with significant facts and assumptions from which he can design and evaluate his own concept.

Unfortunately, however, doctrine writers have elevated the role of staff estimates by ascribing to them the ability to predict the future reliably. The use of predictive estimates is not new. The Army doctrine of 1940 was similarly based upon staff predictions. It was only after a year of predictive failures in combat that the Army rejected the value of prediction in military decision-making. This officer's previous study of intelligence prediction uncovered no evidence that current processes are more successful than those of forty years ago.[10]

Today, however, the claim that war is predictable is dressed up in the highly regarded mantles of computer aided wargaming and Intelligence Preparation of the Battlefield. Although modern predictive processes are qualitatively no different than those of World War II, they have become so complex that the commander cannot judge their accuracy until the battle is over. Their credibility is their greatest threat to the decision-maker. Their promised ability to predict the future seems to eliminate uncertainty and therefore to eliminate risk. They make it appear that the operational decision is really no decision at all, but rather merely the logical conclusion of mathematical calculations. They imply to the commander that his choices, and those of the enemy, are extremely limited. In

reality, they merely restrict the options to be considered, based upon relatively conventional and uninspired norms. All of the possible options and risks remain.

Like the mission analysis, the staff estimate process focuses not only the commander's efforts, but his attentions as well, making long strings of assumptions and eliminating viable possibilities simply because they appear to be unlikely. The intelligence estimate promises to predict compositions, dispositions, strengths, routes and rates of march, timetables, objectives, and even intentions of enemy units which are not as yet committed to the battle or located near the battlefield. The G-3 then constructs three or four detailed courses of action and attempts to predict their outcomes in combat. The G-1 and G-4 predict their ability to support the G-3's concepts, which were themselves predicated upon the assumptions hidden away in the Intelligence Estimate. If an operations order emerges from such a chain of assumptions, then the success of the entire operation hangs on each link in that chain.

In their emphasis upon focusing and simplifying through the use of specific models of the future, the estimates risk violating the one inherent requirement of every estimate. They cannot guarantee that, within their range of projections, they have approximated the truth. By intentionally ignoring perfectly viable (though by their definition unlikely) outcomes, the estimates overlook the fact that the enemy's fondest desire is to do the unlikely. They render the command succeptible to deception and to the pervasive effects of chance on the battlefield. It is

in this doctrinal demand for predictive estimates that the process asks the staff to do something which no one can do. As a result, the staff does not provide the reliable information which, in the final analysis, is a real need of the commander.

In order to conceptualize artistically, the commander depends upon an accurate perception of the battlefield. His perception leads him to assess the risks involved in the current situation and to address all of his risks in the preparation of his concept of operation. If the risks are hidden, then the commander may not allow for them in his planning. He may neglect areas of weakness based only on staff assurances of little or no risk there.

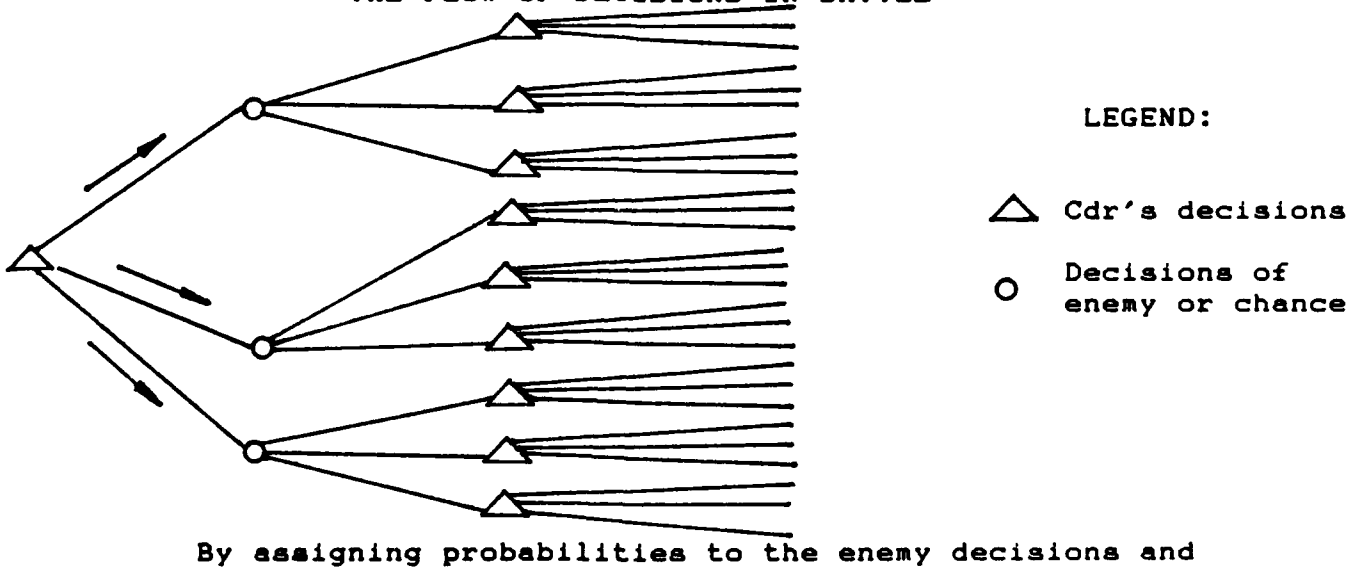
This problem arises from the current definition of the term "risk". It is common today to define risk as the probability that something undesirable will occur, and particularly the probability of the enemy exercising a given capability. It is as a result of this linkage of risk to probability that the G-2 can dismiss a potentially disastrous enemy course of action by predicting that "the risk" of it materializing is low. The decision-maker is thereby encouraged to concern himself only with those enemy superiorities which his staff predicts will be exercised by the enemy.

This definition of the term "risk" makes prediction appear to be essential. It places the commander on the horns of a dilemma. Although he may not believe that it is possible to predict the future, he sees no alternative but to try.

There is an additional fallacy here in believing that such probabilities would remain static even if they could be determined at any one time. The probabilities that the enemy will exercise a given capability tend to float based upon his concept, his perception of the friendly response, and the effects of chance. No one can reliably predict what will happen in combat.

The actual nature of battle is one of expanding possibilities, rather than contracting choices. It can best be diagrammed by a classical decision tree, showing each of the commander's decisions located at major branches. The decisions of the enemy or chance are located on intermediate branches to portray the way in which these two elements influence the outcomes of the commander's decisions.

THE FLOW OF DECISIONS IN BATTLE



By assigning probabilities to the enemy decisions and to the effects of chance, the current military decision-making process is able to ignore many branches on the tree and restrict itself to a few extremely narrow paths. Because it focuses attention on so few outcomes, it

permits the commander to look relatively far into the future without feeling overloaded by the possibilities. However, the branches which it has ignored remain viable. If either the enemy or the effects of chance force the commander away from his predicted path onto the unfamiliar branches, then the plan begins to decay, and the commander begins to lose the initiative. The solution to this problem lies within one's definition of "risk", and will be described later in the paper.

The current decision-making process does not help the commander to develop an artistic conceptualization. If the courses of action are created by the G-3, then the final concept of operation will likely be limited by his knowledge and ability, rather than that of the true operational artist, the commander. It may be nothing more than the bureaucrat's response to the mission, a concept which is relatively conservative, and lacking in the boldness and creativity which are necessary at the operational level. Furthermore, as the product of an imperfectly integrated staff, the concept probably cannot reflect the unity of thought and purpose required in any art form.

It is possible that the current system, by accident or design, seeks to protect the organization from the incompetent leader by focusing him toward standard, or normal, perceptions and decisions. However, the U.S. Army can ill afford any bureaucratic mediocrity in its decision making if it is to execute operational art. Certainly the new

doctrine on the Operational Art calls for a capable artist in command. The artist need not be a military genius to make decisions. Today's senior officer is more than a match for the task. He must, however, understand the degree of uncertainty in war, and his responsibility to take risk in decision-making, rather then to rely upon prediction to provide him with easy answers. The current system does not teach the officer either of these two lessons.

As a result of the decision-making process, the staff provides little real assistance to the commander. It expends its resources in attempting to determine, first, what the commander wants, and second, what the future will hold. Staff officers who should be objective observers and advisors become spokesmen for their own predictions. The system does not provide the commander with the factual information which he needs to be honest with himself. He can easily become unnecessarily optimistic or pessimistic based upon the estimates of his staff. Commanders who have recognized this weakness in the past have looked elsewhere for reliable information.

The staff estimate process is extremely time consuming. If the commander does not permit the staff to conduct its estimates in sequence, beginning with the Intelligence Estimate, he can save some time, but it will be at the cost of proper continuity in the total staff product. Until the estimates are completed, the decision is made, and an order is issued, subordinate commanders are extremely

limited in their ability to prepare in earnest. Thus, the current process fails not only in its ability to provide reliable information, but also in its disregard for the value of time at the operational level.

THE COMMANDER'S ESTIMATE

Upon the completion of the staff's estimates, the commander conducts his own. At this point, he faces the difficult task of integrating these very complex and technical staff estimates into a unified commander's estimate of the situation and concept of operation. Unaware of the many assumptions which the staff officers have made in order to produce detailed predictions, the commander must either; (1) accept them <u>in toto</u> and go with the staff recommendations, (2) refuse them out of confusion and reinitiate the entire estimate process himself, or (3) attempt to wade through the great quantity of data in the estimates, picking that information which he will believe. If he takes the first approach, then he has in fact relinquished command to his staff. If he takes the second, then the staff's effort and the time used have largely been wasted. If he takes the third, then he sets before himself a laborious task of investigation which he can ill afford. He would have to become intimately involved with the entire operation, a chore which this decision-making system seeks to preclude. If he conducts his estimate simultaneously with the staff, he finds himself competing with the primary staff officers for the use of their analytical resources. He probably finds,

also, that the efforts of his staff officers are somewhat meaningless, because he reaches his conclusions before the staff briefs its estimates. The entire process seems misoriented, centering more on the creativity of the staff than on the creativity of the commander. If the commander is to direct the operation in a unified, artistic manner, then the concept must be planted, nurtured, and developed fully in his mind. He must continuously deepen his commitment to it and his understanding of its possible outcomes. In the many trials that could follow the decision, "The commander's will", that is, his depth of analysis, his commitment to the plan, and his aggressive execution of it, may become the critical ingredient of success. The commander must develop that force of will within himself.

THE PLANNING PROCESS: Within the current military decision-making process, the staff responds to the commander's decision by writing the operations plan or order needed to execute the commander's concept. FM 100-5 points out that decisions at the operational level take effect more slowly than at the tactical level. It implies that through the development of long range plans, the command can save time and speed up the execution of the mission. In that way, long range planning appears to be a tool of agility. The current system seems to presume that the U.S. Army is not mentally or physically able to react quickly to the unexpected at the operational level, and that it must therefore think through and develop its reactions prior to

battle. In essense, the system attempts to reduce the importance of agility, by labeling the unexpected as unlikely. By planning for the expected, today's decision-making system attempts to skirt the agility issue altogether. It tries to see into the future and to reduce the need to react to the unexpected. The system produces inflexible plans which focus and tie up the commander's thought process and actually mitigate against his seeing the situation as it really is or reacting to it creatively.

World War II operational commanders were able to transmit orders to subordinates on one or two pages. In truth, that was agility. Their short term decision process generated a brief order which gave maximum time and freedom to subordinate commanders. It also freed senior commanders to concentrate on future operations. Details were left to SOP's. This, in fact, must be the spirit of the operational art today. The command decisions of World War II demonstrated that those veteran commanders had learned of the central nature of the commander as an artist. Although they were subject to the same bureaucratic decision-making process as are today's commanders, they avoided being mastered by it. They developed an informal system which placed them in the driver's seat and permitted quick reaction to the battle. They were deeply involved with current operations. They made quick, personal decisions, and they issued brief, timely orders.

In reality, the long range plan is never better than

the estimate which drives it. If the narrow and predictive staff estimates are inaccurate, if the one chosen set of enemy and friendly courses of action does not come to pass, then the plan totally misses the mark. Based upon the dubious value of predictions, and the narrow, detailed focus of the typical operations plan, it will probably be written for the wrong situation. Rather than enhancing agility, the plan may then prove to be a very inflexible and restrictive obstacle to agility.

The Army must direct its effort into developing true agility, rather than trying to legislate the need for it away through predictive plans. To a great extent, agility is the capacity to react to the unexpected. Today's long and complex plans deal with the expected outcome of the battle. Their preparation leaves little time to deal with the unexpected, undesirable turns of events which FM 100-5 calls "contingencies".[11] Yet these contingencies are the most important planning priorities, for once a commander has focused his resources to provide for the expected sequence of events, then there is little more which needs doing there. His subordinate commanders, armed with the resources which he has provided, should attend to the execution of his concept with minimal direction. It is in those areas where he has taken the greatest risks, the areas of contingency, that the commander owes himself the greatest planning effort.

Right behind contingency planning in importance is the planning for unexpected fortunate events. Lack of preparation

for success is almost as serious a fault as lack of preparation for difficulty. Yet, success is the forgotten contingency. When the situation begins to fall apart for the loser of a battle or campaign, it becomes highly exploitable for the winner. It is not uncommon for both sides to be surprised, with the winner shocked that he has succeeded so easily. This occurs partly because the success rarely presents itself in the expected way. If the winner fails to take advantage of a potential success, he may have to fight harder than necessary to achieve his goal. Conversely, he may lose the initiative altogether, and find the situation reversed by the end of the campaign. The commander who has a broad conception of possible favorable outcomes can dedicate planning to these sequels and branches. Unfortunately, contingency, branch, and sequel planning compete unfavorably for resources with planning actions that address the expected. The process therefore further reinforces its intellectual dependence upon its initial predictions.

THE STAFF SUPERVISION PROCESS: After the approval and issuance of the plans and orders, the staff begins supervising their execution. Its role is to provide the commander with a clear picture of reality. The staff, which has served as inventor of estimates and concepts, finds it difficult to be totally objective in observing the situation. Furthermore, the staff officers face the conflicting responsibilities of <u>perceiving</u> truth and <u>conceiving</u> hypotheses concerning the battlefield at the same time. In

that hypotheses are considerably easier to develop than are factual views, staff officers typically deal in the realm of estimate and opinion, dulling their ability to recognize truth. Many commanders learn to depend upon other sources to answer their most critical uncertainty, which remains, "What is going on out there?". They use directed telescopes, personnel and units whose sole function is to report the situation directly to the commander. They rely upon their own personal visits to subordinate units to tell them of the real situation.

In summary, the present military decision-making process does not suit the needs of the operational artist. It does not expand his view of reality or his conception of the possible. It tends to confine his perceptive ability to the limits of an imperfect model, and to restrict his initiative and creativity.

The commander focuses his combat power and his thought on that which is considered probable, and ignores the unexpected, that which poses the greatest risk. In a sense, his plan depends upon the enemy's cooperation with the estimates. The process directly opposes the artist's decision-making preferences. Although he would prefer to keep his long range options open during the planning phase, the system demands early decisions, in order that the staff can construct detailed plans. On the other hand, just when subordinate commanders need decisions immediately, the system demands that he delay in making them in order that the staff

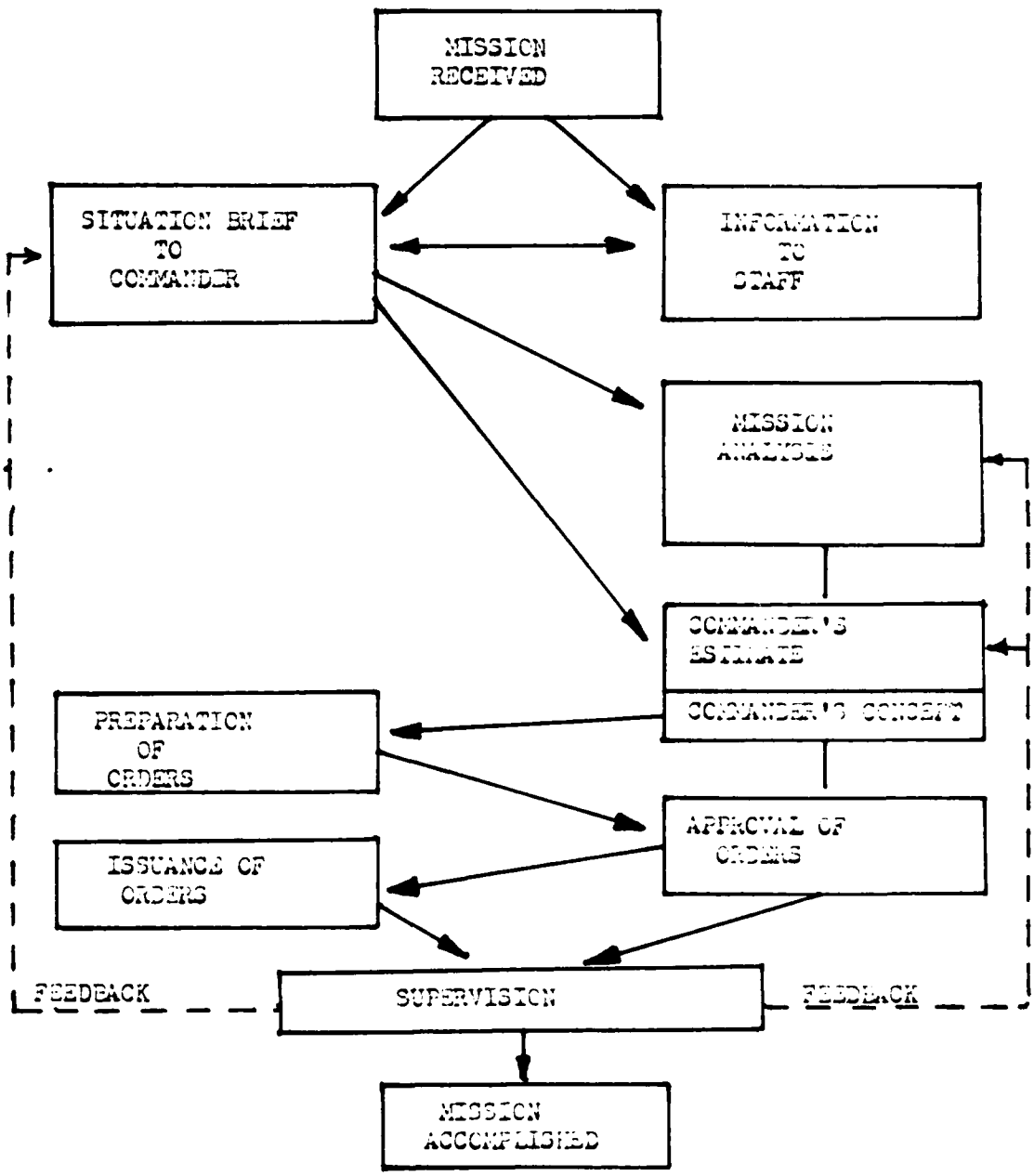
can complete lengthy estimates. In a way, this process has taken the independent decision out of decision-making. Decisions tend to be logical conclusions of the staff estimates. The role of the artist is minute. It is no wonder that commanders so often disregard the process, and that even the doctrine encourages the commander to take short cuts whenever time is a factor, as it always is during combat.[12] This system tries to do more than any such process can do. Creativity, agility, judgment, and initiative cannot be legislated into a formal process. They exist already in the artist. This system mitigates against his use of those talents.

THE NON-PREDICTIVE PROCESS

The decision-making process described below was outlined by COL Townsend to address the weaknesses of the current system. It reinstalls the operational level commander as the artist. It relies upon his creativity, agility, judgement, and initiative. Having begun with this leap of faith, the system rejects the promises of prediction and detailed plans. In this way, the process frees the commander from the predictive dilemma described earlier.

THE SITUATION BRIEF: Immediately after receiving or inferring a new mission, the commander seeks an update on the current situation from his staff officers (See figure 2). This situation briefing replaces the staff estimates as the basis of decision-making. In the situation briefing, staff officers provide confirmed locations and strengths of

THE NON-PREDICTIVE DECISION-MAKING PROCESS



22-A

FIGURE 2

significant friendly and enemy forces. Information on a unit's strength may include levels of personnel and equipment, leadership, morale, supply and other factors which the commander needs to make his subjective judgment of a unit's capabilities. If this information is to serve as a solid, factual foundation for the commander's subsequent decisions, its accuracy is critical. The staff avoids assumption at this time, and qualifies all unconfirmed information by a strict evaluation of its validity. It identifies its unknowns and its unconfirmed information to the commander.

Instead of being aimed at reducing uncertainty about the future, this process concentrates on reducing uncertainty about the present and illuminating the possibilities for the future. Its goal is not to eliminate, but only to identify the risks which the commander faces. Its thesis is that, if the commander can assess the potential dangers in his operation, he can artfully design a plan from a position of knowledge. The G-1 briefs overall personnel strengths, casualty and reinforcement rates, and current personnel problem areas. The G-3 briefs friendly unit locations and strengths with emphasis on capabilities and weaknesses in maneuver, firepower, protection, and command and control. The G-4 briefs current force level and unit logistic capabilities by class of supply, maintenance, and transportation status. The G-2 briefs enemy unit locations and strengths, as well as other confirmed enemy information corresponding to that

provided by the other three staff officers. Like the others, he highlights enemy capabilities and limitations. The commander now has the factual raw material he needs to determine relative capabilities and the risks to the completion of his mission. He makes such determinations in his estimate.

How much detail does the commander require from the situation briefings? By the strictest definition, a unit or an item of information is significant if it relates to the commander's commitment of a resource or alteration of an order. Thus, enemy units which pose significant risk to his subordinates are significant to him because they may call for commitment of a reserve element. In truth, the operational level commander is concerned with a range of three resolutions: the above-mentioned "significant" information which he needs for his own decision-making, the level of detail needed by his subordinates, and the level needed by his boss. He must envision the situation within each of these three mental frameworks if he is to provide advice, assistance, and the necessary linkage between higher and lower echelons as well as making decisions at his own level. The commander himself is largely responsible for coming to understand the views of these three levels of command concerning their missions and the situations. He must likewise understand the viewpoints and situations of his adjacent commanders. His decisions will serve the overall unity of effort if they are based upon such an integrated

viewpoint. Other commanders are his best advisors in this regard.

The commander will call for a situation update immediately upon receiving or inferring a new mission. It is an advantage of this system that the staff officer can brief at a moment's notice, for there is no delay imposed by in-depth Intelligence Preparation of the Battlefield, estimate production, or wargaming prior to the beginning of the commander's estimate.

THE COMMANDER'S ESTIMATE:

THE MISSION ANALYSIS: The commander begins his estimate with the mission analysis. In this process the mission analysis is integrated into the estimate to highlight the operational level commander's responsibility to define the military condition which he hopes to create, and to recognize that his initial definition is subject to refinement. If he has previously analyzed his mission, he must review it in light of what he understands to be the current situation. It is at this point that he may decide to adjust his mission. Although midstream adjustments in the mission may be rare, he must always consider this potentiality, or risk continuing to pursue a mission which has become irrelevant to his strategic objectives. He must even review the strategic objective itself, to assure that it remains achievable.

Viewing the course of events as a decision tree points out that there are many possible outcomes to any major

operation or campaign. Logic would dictate that each of these is either favorable or unfavorable from the commander's point of view. It is reasonable therefore, to assume that there are many possible favorable outcomes of a given campaign. The current military decision-making process, which requires the commander to define one acceptable military condition as the only route to the strategic objective, may restrict the commander's ability to perceive other potentially favorable outcomes when they present themselves. To exercise true agility, the commander must conceive of the full range of satisfactory ends, and must be able to change his direction when warranted.

In this process, the commander's analysis of his mission is more expansive than it is under the current decision-making system. However, he must balance the need to leave options open for the exercise of initiative with the need to be specific, in order to unify and direct the operation. He therefore clearly defines the command's mission from the outset. He reserves to himself, or within a small group of planners, his larger conception of other potential strategic or operational objectives which might emerge during the campaign. It is from within this breeding ground of thought that the commander nurtures his concepts for future operations. It is important to note that, in the non-predictive process, the commander focuses his staff's efforts and attentions toward his areas of concern. This approach is in direct opposition to the current process, in

which the staff endeavors to focus the commander's effort and attention along the narrow paths of its estimates and plans. One must consider which of these techniques is most appropriate for the relationship between the artist and his artisans.

THE ESTIMATE PROPER: With the mission analysis completed, the commander proceeds through his estimate process as it is currently portrayed in FM 101-5[13]. He gains an accurate perception by actively developing his own estimate with each staff officer at his side. Through dialogue, the commander reviews his understanding of the facts and explores the full realm of possibilities with each staff officer. He integrates, in turn, the factual knowledge of the staff officers, as well as their opinions, advice, and concerns. By holding their personal opinions until this point, the commander has assured that he can differentiate between fact and staff assumption in making his own judgments.[14] The discussion which produces the commander's estimate must be a session of tough verbal give-and-take. The staff must feel free to discuss and even argue significant points, in order that the commander can develop and test his concept. Through this dialogue, the commander reconciles differences in facts and opinions, and develops his estimate of the situation. He synthesizes for himself and for the command a deeper, broader, and more complete picture of the situation and its possible outcomes. Thinking in terms of mission and risks, and knowing all that is known about the

current situation, the commander can artistically apply his skills and style to the construction of his concept of operation. His staff officers serve always as his auxiliaries, without interfering with the artistry and unity which must flow from him.

The non-predictive process is considerably more demanding than the Army's present system. It requires that staff officers provide reliable information, the most difficult of all things to determine in the fog of war. It does not accept assumption, opinion, or estimate posing as fact. The conventional wisdom holds that the predictive estimate is the most difficult of the staff officer's current responsibilities, and that the staff officer is not "earning his pay" unless he is willing to risk his reputation on a prediction to help the commander with his decision. This view is incorrect. Just as it is easier to guess than to know, so it has always been easier for the staff officer to estimate, than to determine and provide fact. If the staff officer is required to determine the real situation on the battlefield, then the commander can objectively judge him, based upon his proven accuracy. He will be under the gun to confirm his information on one side, and to erase gaps in information on the other. He will be driven toward effective information collection, aggressive staff supervision, and careful analysis. Prohibited from indiscriminate use of indicators and assumptions to fill in gaps in factual knowledge, staff officers must admit their areas of uncertainty. On the other

hand, the staff is freed from the conflicting duties of the current system. It may therefore be able to meet its responsibilities for providing reliable information to the commander.

THE RISK ANALYSIS: The non-predictive decision-making process does not define risk as the probability of the enemy exercising a dangerous course of action. It defines risk as the dictionary does: "A chance of encountering harm or loss; hazard; danger".[15] It looks at risk as any hazard or danger to the accomplishment of the mission. Risks generally take the form of imbalances between enemy and friendly capabilities. Col Townsend wrote, "The commander must determine which of the enemy's capabilities he can handle with his own resources. All enemy capabilities greater than those that can be handled by his own resources are <u>risks</u> insofar as he is concerned."[16] This definition proposes that risk is an imbalance which can be identified by comparing the physical capabilities of both sides. By this definition, a risk exists as a result of every unfavorable imbalance in capabilities, irrespective of the enemy's "intentions" to capitalize on the imbalance. The commander concentrates his staff's efforts upon reliably determining the physical capabilities of enemy and friendly forces. He identifies the risks involved by comparing these capabilities. His staff's greatest role may be here, in illuminating the commander's risks by accurately and completely portraying the current situation.

DEVELOPING THE CONCEPT: Based upon his mission and the attendant risks, the commander determines whether the operation should be sequenced. If so, then he imposes a set of intermediate objectives upon his concept development process. As an operational artist, he envisions the combination of events and resources which becomes his concept of operations.[17] He develops this concept in the fashion most suitable to his style and needs. He may choose to construct and analyze several opposing courses of action, or he may establish only one. The real issue is that he does this based not upon a prediction as to the way things will go, but rather based upon his understanding of the risks which he faces.

ACCEPTING AND DISTRIBUTING RISK: The commander begins to develop his concept when he decides to "reduce" certain risks and to "accept" others. He reduces a risk by adjusting his capabilities; moving units or altering their strengths, in order to eliminate the imbalance. He accepts a risk when he decides to enter battle knowing that the risk exists, and that the operation may fail as a result of it. Risk, the potential for failure, is inherent in war. The predictive form of decision-making tends to deny that risks exist by assigning probabilities to them and viewing many of them as unlikely. The non-predictive process highlights the acceptance of risk as an essential responsibility of command. Having admitted that the potential for failure exists, this process deals forthrightly with the matter by charging the

entire chain of command to "distribute" its risks. Townsend wrote, "The senior commander bears responsibility for any risks accepted by his subordinates."[18] This means that the subordinate must discuss the risks he wishes to accept with his senior commander. In a sense, he attempts to distribute the risk to the next higher level. The senior commander should either underwrite the risk from within his current capabilities, alter his capabilities in order to cover the risk, accept risk himself and notify his superior commander, or reject the subordinate's proposal and instruct him to reduce that risk.

Through this conscious bargaining of risk between commanders at various levels, the overall force becomes a coordinated fabric. It gains resiliance and depth. The process assists the higher level commander in determining his risks and in taking steps to reduce or accept them himself. However, this process does not necessarily protect the commander who originally accepted the risk. If the enemy exercises the option open to him because of this imbalance, he may be successful. However, if the risk was distributed up the chain of command until a commander was able to reduce it at his level, then the enemy's initial success should halt there. This process does not prevent the loss of a battle. It is designed to prevent a lost battle from becoming a lost campaign or war.

The process of accepting and distributing risks is also incapable of magically compensating for "overwhelming

risks." Throughout history, war has been fraught with risks so great that no echelon in an entire army could reduce them. Such situations are common in a force which is outnumbered or suffering defeat. Even accurate staff predictions cannot assist the artist in this case. He must know the facts about the hazards he faces. He must develop and execute operations which, through their boldness, speed, and surprise, deny the enemy an ability to bring his superior capabilities to bear. The non-predictive decision-making process provides the artist with just what he needs to build and execute such operations artistically .

THE DECISION: The commander's decision to adopt and execute a new course of action must be properly timed. Although the staff can assist by calculating reaction times of friendly and enemy units, it is the artist who must consider all pertinent information and decide when to make critical decisions. He must balance the natural inclination to delay making decisions against the need to give a timely order to subordinate commands. The non-predictive decision-making process encourages the commander to make decisions only when they are needed to initiate an action. Although forced to make some early decisions concerning such support matters as deployment priorities, the commander minimizes premature decision-making whenever he can. The formal commander's estimate need not, therefore, end in a decision. It is merely a period of organized thought during which the commander may consolidate his appreciation of the

situation and construct a concept, or a set of alternative courses of action. A formal estimate which does not end in a decision will return the commander and staff to the planning mode. Giving himself the gift of additional planning time, the commander can provide his staff with specific information requirements and continue to work informally on the estimate, reviewing it, revising it, and testing it against the thoughts of his associates until he perceives a need to make the operational decision.

What kind of a decision emerges from this process? It is first and foremost the commander's own decision, initiated at his will. It expresses the unity and direction of the artist's mind, and therefore lends unity and direction to the overall effort. This decision-making process does <u>not</u> hinge on "defeating the enemy's plan"[19]. It therefore releases the commander from his need to predict the enemy's plan or "Intentions"[20], and treats the specifics of the enemy's plan as irrelevant. By its artistic approach, the process tends to frustrate any enemy who depends upon prediction, by forcing <u>him</u> to deal frequently with the unexpected. It is the unpredictable nature of the American which is most disconcerting to the Soviets at present. This system promises to make American decisions much less predictable than they are today, and it therefore threatens to overturn the Soviets' predictive planning process.

With this system as a tool, the commander gains speed and agility. He may be able to outrun the enemy's

decision-making process, which demands extensive data collection and quantification. The commander can more quickly perceive the situation as it is and conceive of an action which will alter the situation in his favor. Only a process such as this, which is qualitatively different than that of the Soviets, could permit the U.S. to "turn inside the Soviet decision cycle".

THE ROLE OF PLANNING: How can the operational artist conduct his long range planning without predicting the future situation? The non predictive decision-making process simplifies the planning function by requiring no lengthy written plans. Planning is a process of appraising the possible courses of action and the risks facing both sides at the next critical decision point. Releasing the staff from the writing of elaborate estimates and plans may provide the commander with a more responsive organization, and with a staff that can contribute to the agility of the command through its rapid operation. As a result, planning need not project as deeply into the future as it does when producing written products.

Prediction is not needed because decisions are made based upon current risks, which can be ascertained from factual information. The terms "current" and "future" are relative, and at the operational level, a current operation extends several days forward. In the same way, the operational commander's image of the present is extended well beyond that of the tactical commander. Because the situation

changes more slowly as well, the operational level commander has more time to react to a change in the situation than does the tactical commander. As a result, it is possible for the operational level commander to make a decision to execute an operation a week hence based upon today's factual information. If his command and control system and his subordinate commands are agile, they will be able to execute his order.

The decision itself holds no claim to greatness. It is merely a good decision made in time rather than a great decision made too late. The commander therefore remains wary of and sensitive to the emergence of the unexpected. He recognizes that contingency and sequel planning are essential.

The commander divides his staff into planners and operators. The operations staff is a staff of execution. It assists the commander in implementing his decisions. As such, it writes the orders, supervises their execution, and provides information to the commander in order that he may alter those orders if necessary. The planning staff is a staff of anticipation. It gathers and organizes the raw materials which the commander will need for making his next major operational decision. The planning staff builds a picture of the full range of possible situations which the commander could face at his next major decision point. It assists him in determining when a decision will be necessary, and it seeks to expand his thought as to the

friendly and enemy options which the situation might present. The planners develop appraisals of the full range of possible enemy and friendly capabilities which could exist at the next decision point, and possible outcomes of those decisions. Their initial models are based largely on assumptions and modeling efforts such as IPB and wargaming. This system is significantly different than the current one because the planners are not permitted to eliminate any possibilities except those which are proven infeasible. They do not focus the commander's resources nor his attention unnecessarily.

As the time approaches for the commander to make his next major decision, he draws his operations staff close to the planning effort and conducts his formal decision-making process. With both staffs present, he links the present and the future, makes his operational decision, and then relocates the planning horizon out to the probable time of his next major decision. His decision initiates a handoff process in which the operations staff gains responsibility for managing operations over an enlarged period of time. Much of this period, which was the realm of future operations prior to the decision, is part of the present in the commander's view. With this decision, the commander issues new guidance to the planners, telling them of his tentative concept for the next phase, and the probable point at which that phase would begin.

COMMAND AND STAFF SUPERVISION: Because the

non-predictive decision-making system depends upon fact, information must be verified and periodically rechecked for use by the decision-maker. This system therefore accomplishes command and staff supervision while it simultaneously contributes to the next decision. The commander therefore stands to know as much as can be known about the current situation. He can perceive the need to take action, and can see the effects of his decisions accurately and quickly. The commander is able to supervise and affect his current operation, because it is the center of his attention.

SUMMARY:

The non-predictive decision-making process holds many potential advantages over the Army's present system. The most important of these is that it frees the commander to exercise operational art, rather than to depend upon a bureaucratic procedure for his conceptualization process. It orients his thinking on his own objectives, rather than on the plan of the enemy. When he has made a decision, the process protects him, by preparing for the unexpected. In essence, this decision-making process expands and enhances the unity of the commander's thought without distorting it. It is an amplifer of the commander's artistry.

With such a system must also come potential disadvantages. A process which puts its faith in the operational commander is sensitive to that commander's artistic capability. The operational commander must, therefore, be a "capable" practitioner of the operational

art. This system does not, however, require that the commander be a rare genius. It assists the capable commander to order his thought, to recognize risks, and to relate them to the mission.

The system demands a great deal of attention from the commander. In combat, however, when so much rests in the balance, commanders have historically devoted much of their attention to the business of tactics and decision-making. This time and attention will not be spent in the formal estimating procedure, but rather in the field, in conjunction with his command supervision duties. Nevertheless, any decision to adopt this process must be made in light of the requirements which it will place on the decision-maker.

The final challenge posed by this process is its reliance upon agility. The process itself helps to provide a measure of agility by improving the accuracy of the commander's perception, the unity of his effort, and the timeliness of his decision-making. However the process does not in itself result in shorter, simpler orders or in more responsive forces. The Army must make these improvements separately. The non-predictive process does at least visibly depend upon physical agility. The current system, on the other hand, neglects the issue, falsely promising to avert the need for true agility by predicting the future.

CONCLUSIONS:

The U.S. Army's current predictive decision-making process may well be incompatible with the needs of the

operational commander. It restricts his thinking, conceals his risks, and renders him reactive to the enemy. Because it relies upon its own predictions, it leaves the commander very succeptible to surprise. It is a time consuming process which leaves little time for subordinate unit planning and execution.

The suggested non-predictive decision-making system may better serve the operational commander. It provides him with factual information for his use in decision-making. It highlights his risks, and helps him to provide for the risks of subordinate commanders. It encourages him to plan for the unexpected, and thereby to avoid surprise. It enhances unity of effort by amplifying the products of a single mind, the mind of the operational artist. It is a relatively rapid form of decision-making which provides maximum time for subordinate unit decision-making and execution.

The purpose of this paper is to encourage critical thought about the current system as much as it is to advance an alternative. It is particularly important that commanders and staff officers recognize the weaknesses in the tool which they use each day. Barring a revision in the process, an understanding of shortcomings in the present system is essential for all.

Non-predictive decision-making is a very different philosophy. As presented herein, it is only a concept.

However, it appears worthy of further study and research. It offers the operational commander a unique opportunity to command the AirLand Battle as an artist, in the spirit of the Army's aggressive new doctrine.

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